***Use Plants to Improve Your Indoor Air Quality**
By Nicholas Harter

The Environmental Protection Agency (EPA) estimates that our indoor air quality is 5 to 10 times more polluted than the air outside our home. This is because of the toxins contained in our cleaning products, paint, carpet glue, and more. And what's worse is that after we paint a wall or lay down new carpet, those toxins off gas into the air in our home for years. What can we do about this problem? How can we make our homes a healthier place to live? One option is to opt for more environmentally friendly products such as low or no-Volatile Organic Chemicals (VOCs) products. Low-VOC paints are now readily available at paint and home improvement stores, and more green cleaning chemicals are available every day. But this doesn't prevent all of the toxins in our home, especially the ones that are still off gassing from years ago.

Indoor plants remove these toxins and purify our air for us. In 1989 NASA created a Bio-home which tested indoor air quality. Indoor plants were successfully used to remove toxins and alleviate sick building syndrome, a problem created by the presence of indoor air toxins. Symptoms associated with sick building syndrome include allergies, asthma, eye, nose, and throat irritations, fatigue, headaches, nervous-system disorders, respiratory congestion, and sinus congestion. According to the EPA, "sufficient evidence exists to conclude that indoor air pollution represents a major portion of the public's exposure to air pollution and may pose serious acute and chronic health risk."

Plants for Clean Air Council (PCAC) and Wolverton Environmental Services, Inc. expanded this research in 1990 to test specific houseplants for their usefulness in removing commonly found indoor air toxins. So far, fifty houseplants have been tested for their ability to remove various toxic gases from sealed test-chambers. Formaldehyde, Xylene, Benzene, Trichloroethylene, Chloroform, Ammonia, Alcohols, and Acetone were introduced to the plants. Plants were rated on their ability to remove chemical vapors, ease of growth and maintenance, resistance to insect infestation, and transpiration rate. Transpiration rate is the rate at which plants put moisture back into air (a key issue during the dry winter months).

The following are the top 10 plants, listed from best to least best (keep in mind these are the top 10, so all are excellent indoor plants):

Areca Palm (Chrysalidocarpus lutescens): Also known as yellow palm or butterfly palm. In a home setting, a 6 foot tall areca palm transpires approximately 1 quart of water every 24 hours. The areca is consistently rated among the best houseplants for removing all indoor air toxins tested.

Lady Palm (Rhapis excelsa): Lady palm is one of the easiest houseplants to care for and is highly resistant to attack by most plant insects. It is also one of the best plants for improving air quality.

Bamboo Palm (Chamaedorea seifrizii): It has an excellent overall rating and one of the highest transpiration ratings. It pumps much needed moisture into the indoor atmosphere, especially during the winter months when heating systems dry the air. This palm is also one of the top-rated plants tested for the removal of benzene, trichloroethylene, and formaldehyde.

Rubber Plant (Ficus robusta): Bred for toughness, it will survive in less light than most plants its size. It will tolerate dim light and cool temperatures. This plant is easy to grow and is especially effective at removing formaldehyde.

Dracaena "Janet Craig" (Dracaena deremensis): It can tolerate neglect and dimly lit environments. "Janet Craig" is best among the dracaenas for removing chemical toxins from the indoor environment. Scoring well in all categories, it should live for decades if properly maintained.

English Ivy (Hedera helix): It is easy to grow and adapt to a variety of home environments. However, they do not generally do well in high temperatures. The variegated ivies require plenty of light, otherwise they lose their coloring. It has an excellent overall rating and is particularly effective at removing formaldehyde.

Dwarf Date Palm (Phoenix roebelenii): When its environmental needs are met, the date palm can survive for decades. It is one of the best palms for removing indoor air pollutants and is especially effective for the removal of xylene.

Ficus Alii (Ficus macleilandii "Alii"): A magnificent large plant, its ability to help purify the air, ease of growth and resistance to insects make it an excellent choice for the home or office.

Boston Fern (Nephrolepis exaltata "Bostoniensis"): As an indoor plant, the Boston fern requires a certain amount of attention. It must have frequent misting and watering or the leaves will quickly turn brown and begin to drop. Of the plants tested, it is the best for removing air pollutants, especially formaldehyde, and for adding humidity to the indoor environment.

Peace Lily (Spathiphyllum sp.): The peace lily excels in the removal of alcohols, acetone, trichloroethylene, benzene, and formaldehyde. Its ability to remove indoor air pollutants and its excellent performance in all categories make it a most valuable houseplant.

Some of the other houseplants that deserve an honorable mention for the performance include the Corn Plant, Golden Pothos, Kimberley Queen, Florist's Mum, Gerbera Daisy, Dracaena Warneckei, and Dragon Tree.

No matter which of the above plants that you choose to decorate your home with, you and your family will breathe healthier air because of it. We have become accustom to thinking that are indoor air is cleaner than the air outdoors, especially when we are told to stay indoors on smog alert or air quality action days, however, without a few precautions such as indoor plants, this may not be the case.